

StormMax FG-5100T

INSTALLATION AND GLAZING MANUAL

StormMax FG-5100T INSTALLATION & GLAZING MANUAL

TABLE OF CONTENTS

General Information		Page No
1	FRAME FABRICATION	
1.1	Measuring opening and sizing frame	3
1.2	Cutting material	4
1.3	Vertical Mullion fabrication	4
1.4	Head and sill fabrication	4
1.5	Jamb mullion fabrication	5
1.6	Subsill fabrication	6
2	FRAMING ASSEMBLY	
2.1	Subsill end dam assembly and preparation	6
2.2	Frame panel assembly	7
3	FRAME INSTALLATION	
3.1	Subsill sealant and splice	7
3.2	Installation of panel frames	8
3.3	Sealant at Jambs	8
4	GLAZING	
4.1	Glazing preparation	9
4.2.1~2.5	Setting of glass and exterior gasket sealant	9
4.2.6~7	Interior structural sealant application	10
5	DOOR INSTALLATION	
5.1	Preparation of door frame	11
5.2	Installation of door frame	11
5.3.1-3.8	Door preparation and glazing	12
5.4	Entrance door frame installation	12
	FG-5100T Parts, Extrusions and Accessories	13

Quick Reference Guide

1. Glass Sizing
D.L.O. + 1 1/8" for width and height.



StormMax FG-5100T
Installation and Glazing Manual
Page title

Installation & Glazing Manual
is product specific - For review only

StormMax FG-5100T INSTALLATION & GLAZING MANUAL

FRAME FABRICATION

1.1 Establish Frame Size & Cut Metal to Length

Measure width of rough opening.

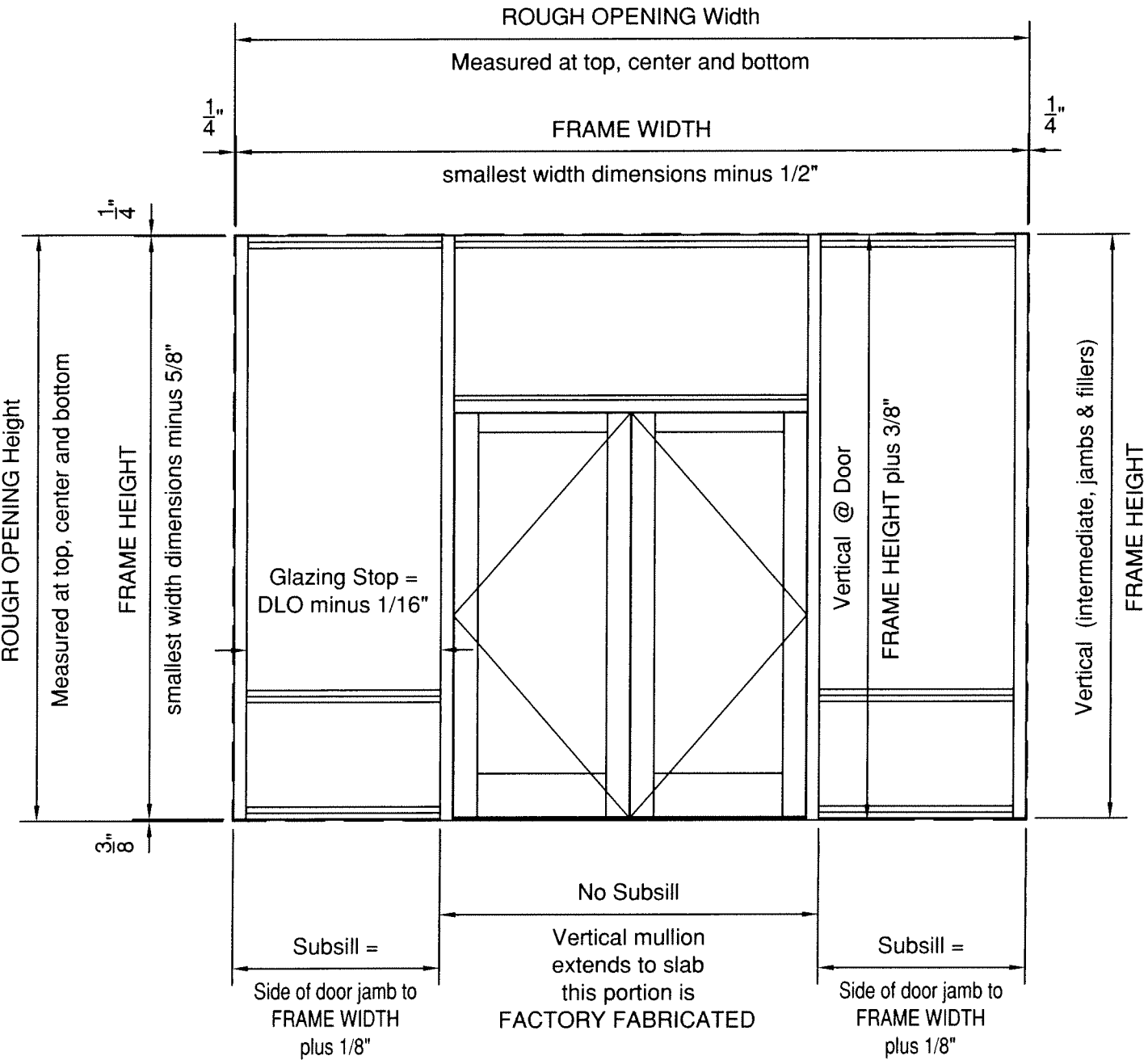
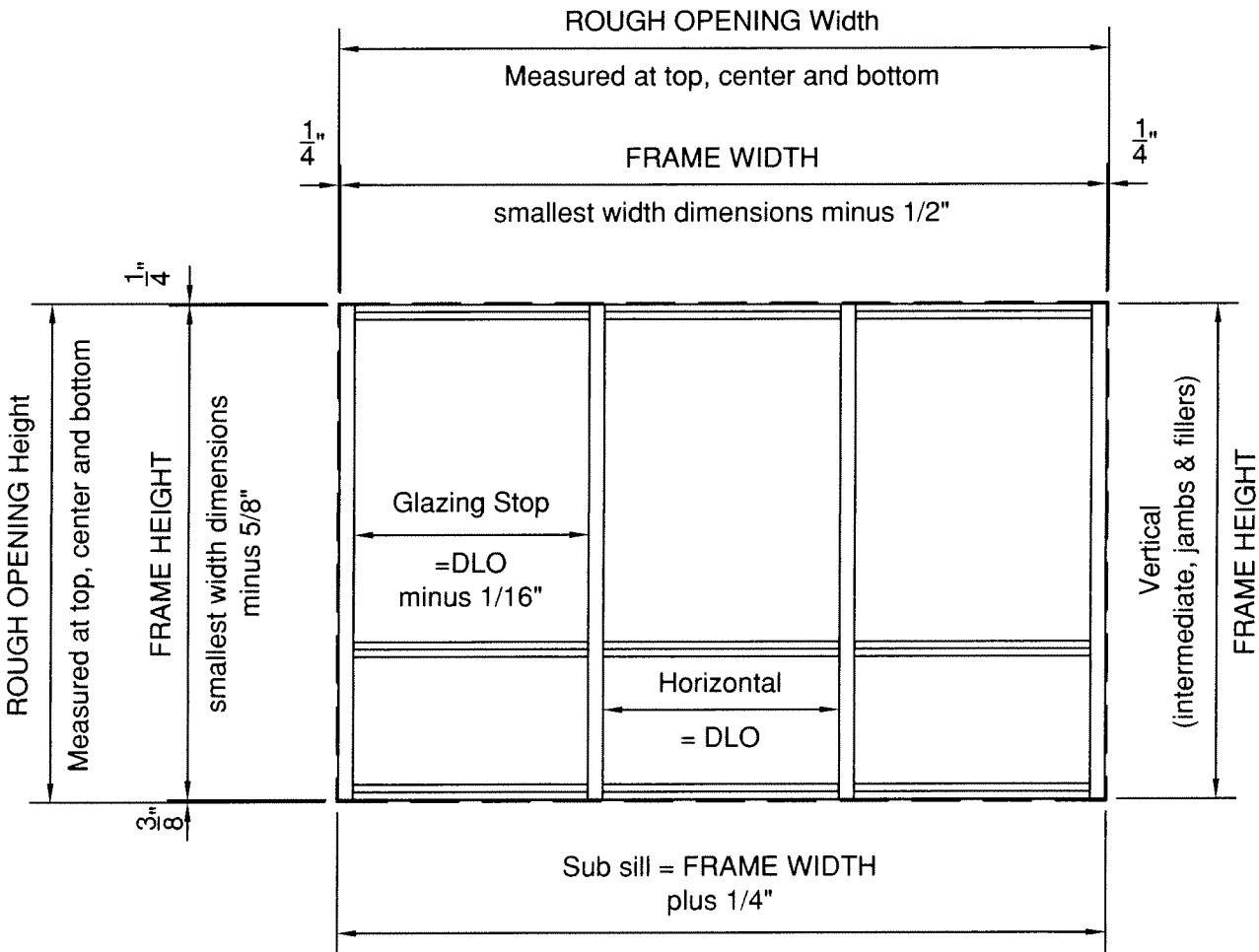
- A. Measure opening at bottom.
- B. Measure opening at center.
- C. Measure opening at top.

The frame width will be the smallest dimension less 1/2" allowing for a 1/4" caulk joint at each jamb.

Repeat process to determine frame height.

- A. Beginning on left side of opening, measure dimension from top to bottom.
- B. Repeat at center.
- C. Repeat at right side of opening.

The frame height will be the smallest dimension less 5/8" to allow for subsill and a 1/4" caulk joint at the head and sill.



StormMax FG-5100T
Installation and Glazing Manual

General Notes
Installation & Glazing Manual
is product specific - For review only

StormMax FG-5100T
Release 1 Date 07-2010
SHEET

FRAME FABRICATION

Framing Members

FG-5215 Subsill flashing at frames without doors	Frame Width plus (+) 1/4".
FG-5215 Subsill at entrance locations	Door jamb to Frame Width plus (+)1/8". (Subsill is to butt tight against door jamb(s) and is cut 1/8" longer than width of side light(s) on either side of door frame.)

FG-5218 Jambs	Cut to Frame Height.
FG-5216 Vertical Mullions and FG-5217 filler	Cut to Frame Height.

FG-5214 Horizontal and FG-5213 Head/Sill Cut to D.L.O.
Slide in FG-5177 Glass Stops Cut D.L.O. minus(-) 1/16"

FG-5218 JAMB

FG-5217 FILLER

FG-5216 MULLION

2 1/2"

7/8"

1"

2 1/4"

"F" (.257" DIA.)
DRILL THRU TYP.

2 1/2"

7/8"

1"

2 1/4"

2 1/2"

7/8"

1"

2 1/4"

Figure 1
Vertical Mullion Fabrication

Figure 1
Vertical Mullion Fabrication

1.5 Fabricate head and sill for anchor holes, the number of anchors vary based on substrate material. Reference anchor charts for number of anchor holes and locations for each substrate. First hole is always 2" from end, each additional fastener hole are at required minimum spacing.

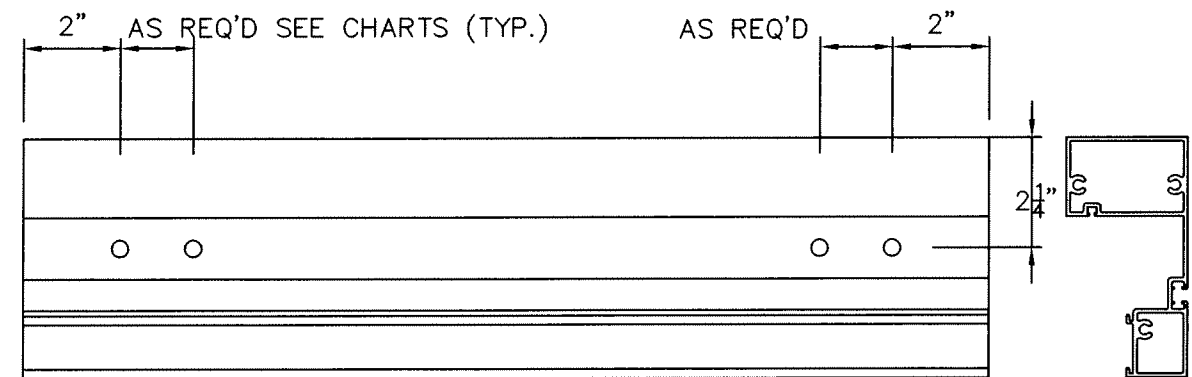


Figure 2
Head & Sill Fabrication

FG-5213
HEAD / SILL

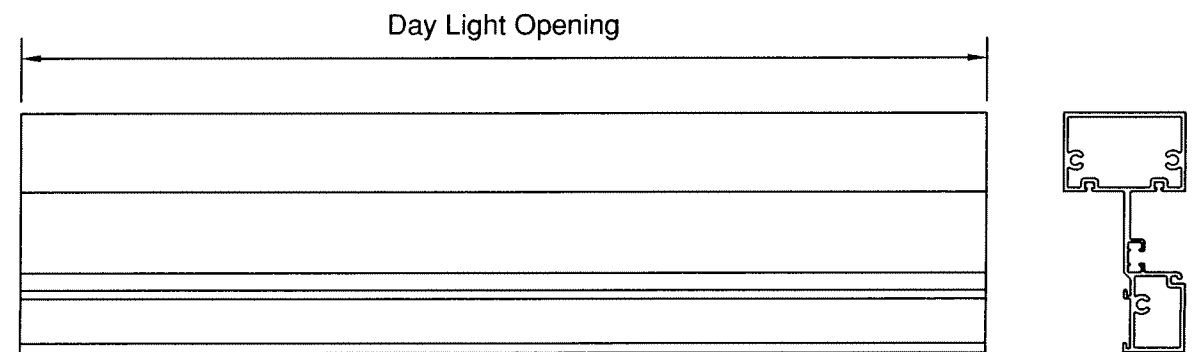


Figure 3
Horizontal Fabrication

FG-5214
HORIZONTAL

StormMax FG-5100T INSTALLATION & GLAZING MANUAL

FRAME ASSEMBLY

WET GLAZED FRAMING

2.2 Frame Panel assembly.

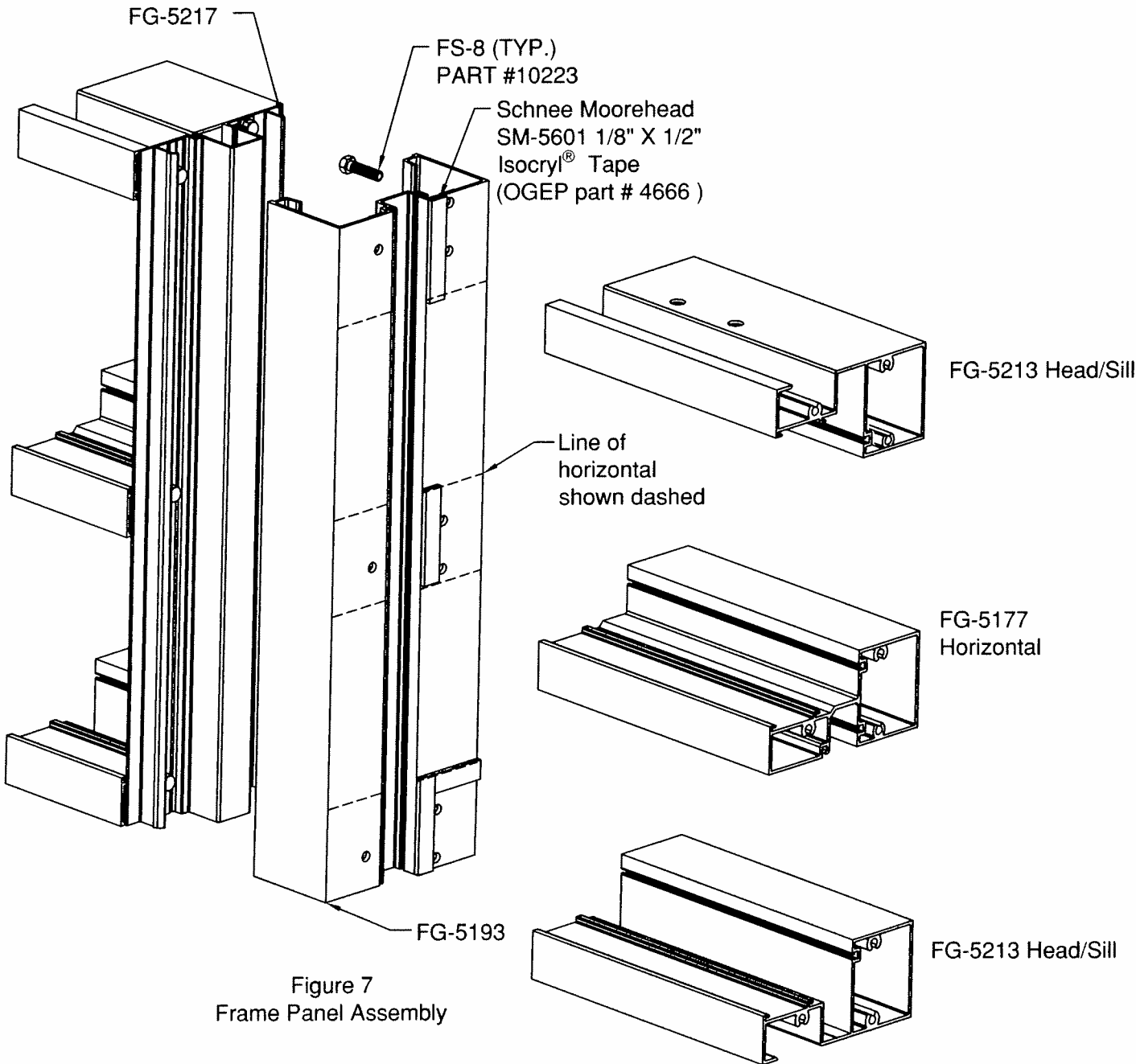


Figure 7

Frame Panel Assembly

- 2.2.1 Clean framing members at locations where Isocryl[®] Tape is noted to be attached. SEE FIGURE 7, at tape intersection there should be no gaps.
- 2.2.2 Install FG-5185 Wet Glaze spacer gasket on vertical members, prior to assembling horizontals, sill and head members. Spacer gasket runs through entire length of vertical members.
- 2.2.3 Attach horizontals to verticals using (3)FS-8 (#14 x 1\"/>

FRAME INSTALLATION

WET GLAZED FRAMING

3.1 Subsill installation

- 3.1.1 Position fabricated subsill with end dams into opening. Center into opening allowing shim space at jambs. Shim to level with 1/4\"/>

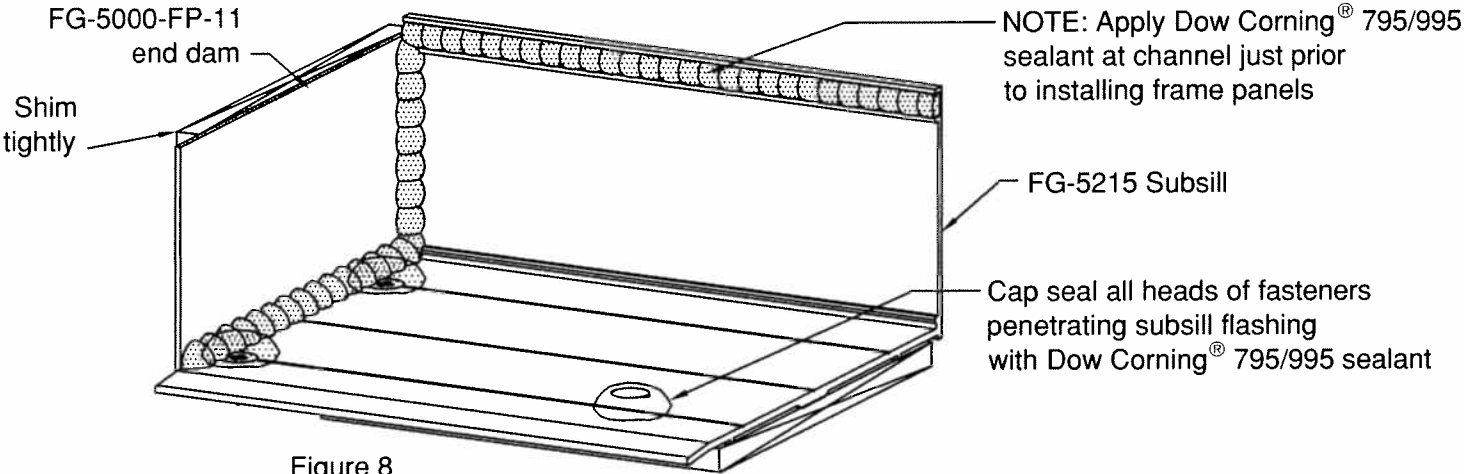


Figure 8

Subsill Installation and sealing of end dam

- 3.1.2 Wedge shims tightly between end dams and jamb substrate at each end prior to installing frame panels. These shims prevent the end dams from being dislodged while frame panels are being installed. Completely seal end dams as shown SEE FIGURE 8.
- 3.1.3 Apply sealant to 0.040\"/>

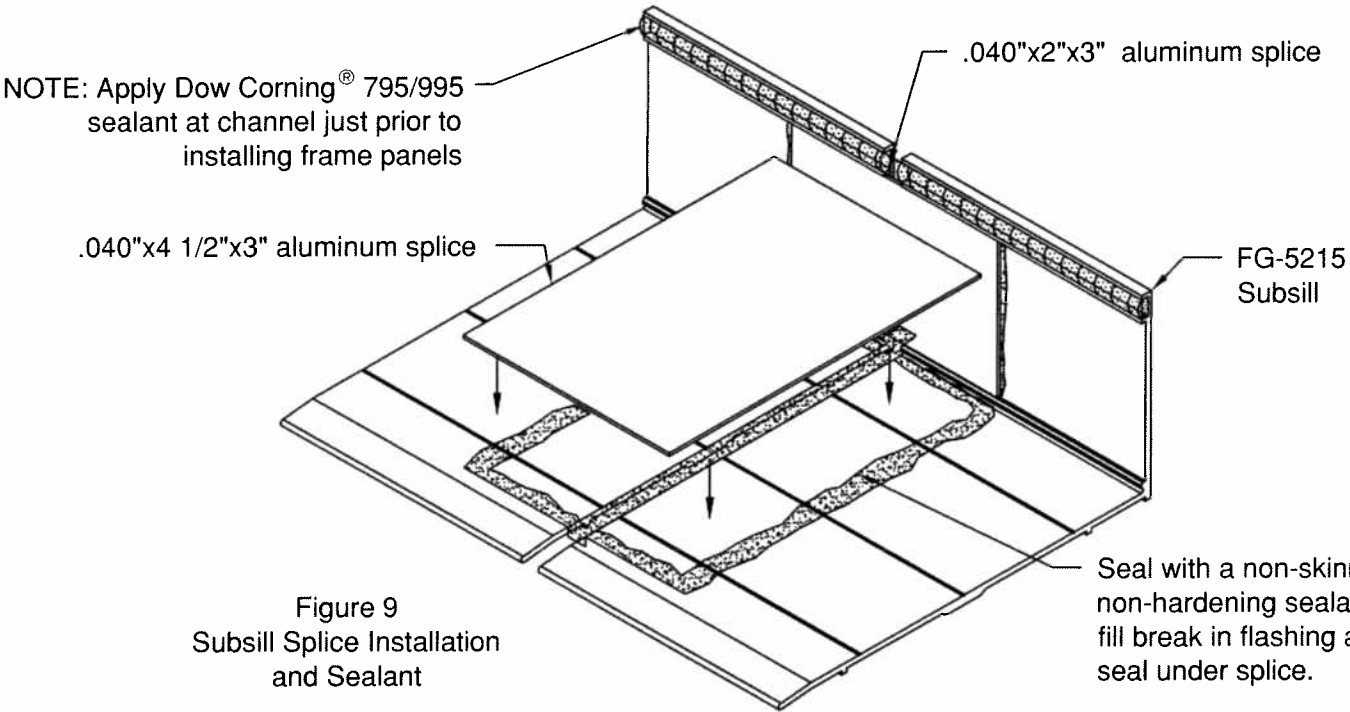


Figure 9

Subsill Splice Installation and Sealant

Oldcastle
BuildingEnvelope[™]

803 Airport Road
Terrell, TX 75160
(800) 869-4567

StormMax FG-5100T

Installation and Glazing Manual

General Notes

Installation & Glazing Manual
is product specific - For review only

Storm Max FG-5100T IM

Release 1 Date 07-2010

SHEET

7

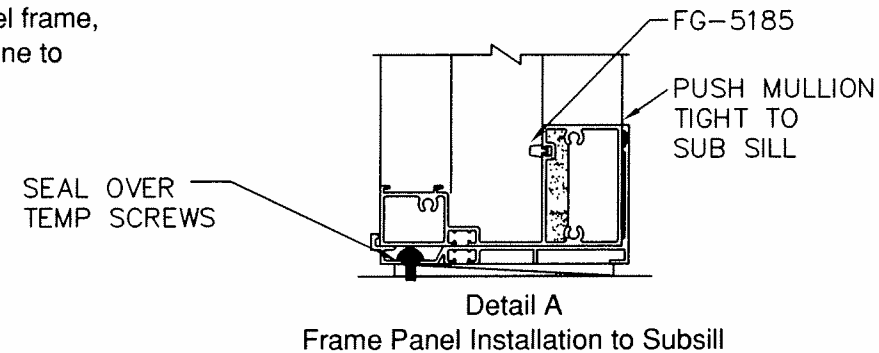
OF 13

FRAME INSTALLATION

3.2 Installation of framing panels.

3.2.1 Install assembled frame panels into opening starting at either jamb and continue working toward the other jamb until the last frame panel is installed. Ensure that the frame panels are pushed tight against the upright leg of the subsill. Remove excess sealant after panels are installed and anchored.

3.2.2 Prior to assembling each additional panel frame, apply 12" of Dow Corning® 795/995 silicone to bottom of interior snap engagement. See **Figures 10 below**.



Prior to inserting and engaging Filler in to mullion apply 12" of Dow Corning® 795/995 silicone as shown. Remove excess squeeze out after frame is anchored

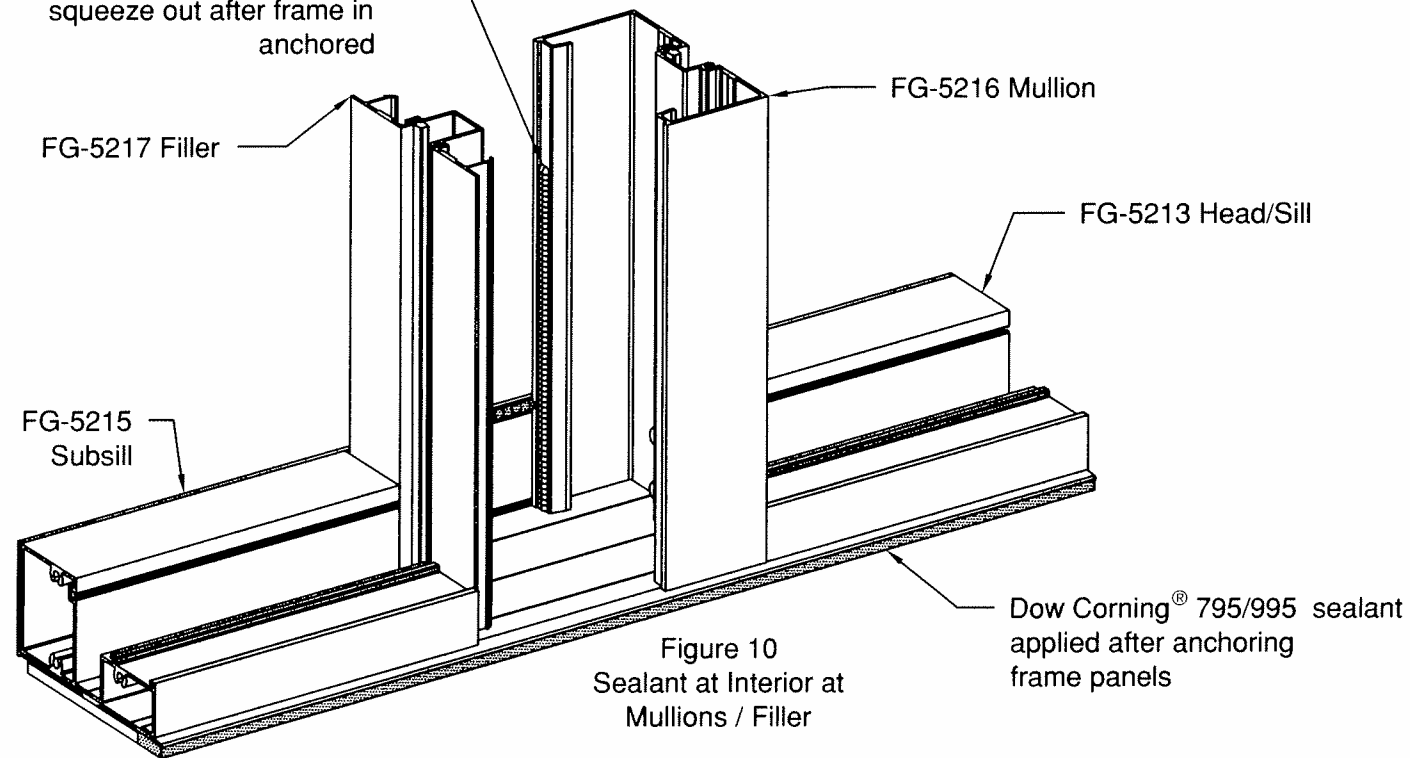


Figure 10
Sealant at Interior at
Mullions / Filler

3.2.3 After all panels are installed, shim beneath subsill as required at fasteners. Match drill holes through sill into substrate. Remove dust from holes. Apply sealant into anchor holes prior to anchoring. Cap seal with Dow Corning® 795 or 995 fastener heads.

3.2.4 Plumb vertical mullions, and match drill holes into substrate at head. Anchor and shim as shown. It is not necessary to cap seal fasteners at head. Check D.L.O. and diagonal dimensions every 4 bays to ensure correct spacing and frame squariness to prevent dimensional buildup.

3.2.4 Match drill holes in jamb to substrate. Anchor and shim as required. Cap seal fastener heads.

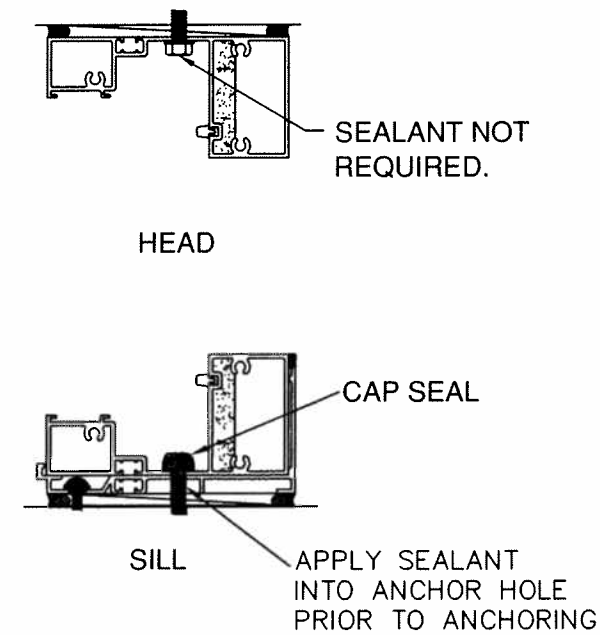


Figure 11
Sealant Application

3.2.5 Once all individual frames are secured to the opening, then completely seal with a continuous bead of Dow Corning® 795 or 995 silicone sealant or equal, across head and at each jamb. At the sill run a bead across the subsill.

3.3 Interior sealant @ jambs and along subsill
Starting from the bottom, seal up the jamb to a height of 24". It is not necessary to seal the balance of the jamb on the interior or beneath the interior side of the sub sill flashing other than for cosmetic reasons.

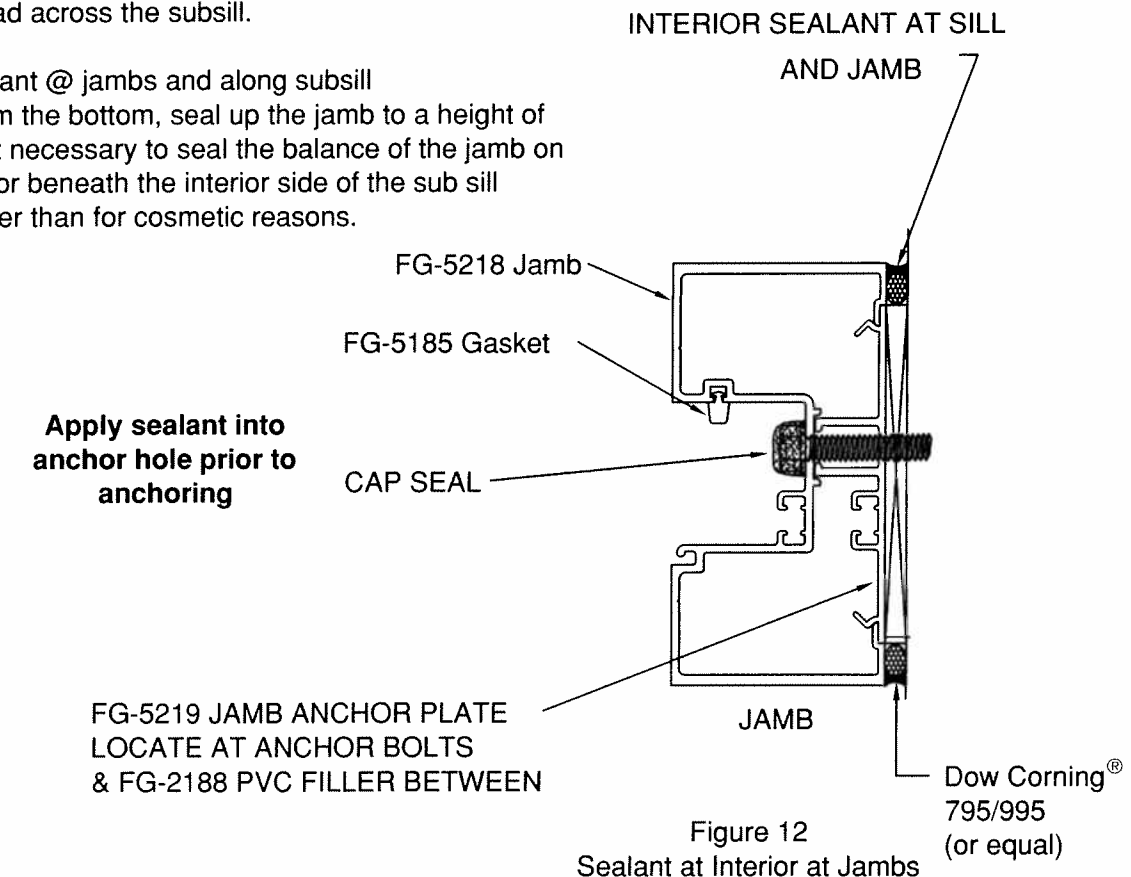


Figure 12
Sealant at Interior at Jambs

GLAZING - WET GLAZED

4.1 GLAZING PREPARATION -Wet Glazing

- 4.1.1 Remove all debris from glazing pockets to prevent blockage of weeps/drains.
- 4.1.2 Install water diverters see **Figure 13** after lower lite is in position.
- 4.1.3 Install FG-5185 spacer gasket in horizontal members
Note: also install FG-5185 at vertical , if it was not installed prior to attaching horizontals **see Figure 7 on sheet 7** .
- 4.1.4 At sill, install FG-5225 setting chair (2 per lite at 1/4 points)

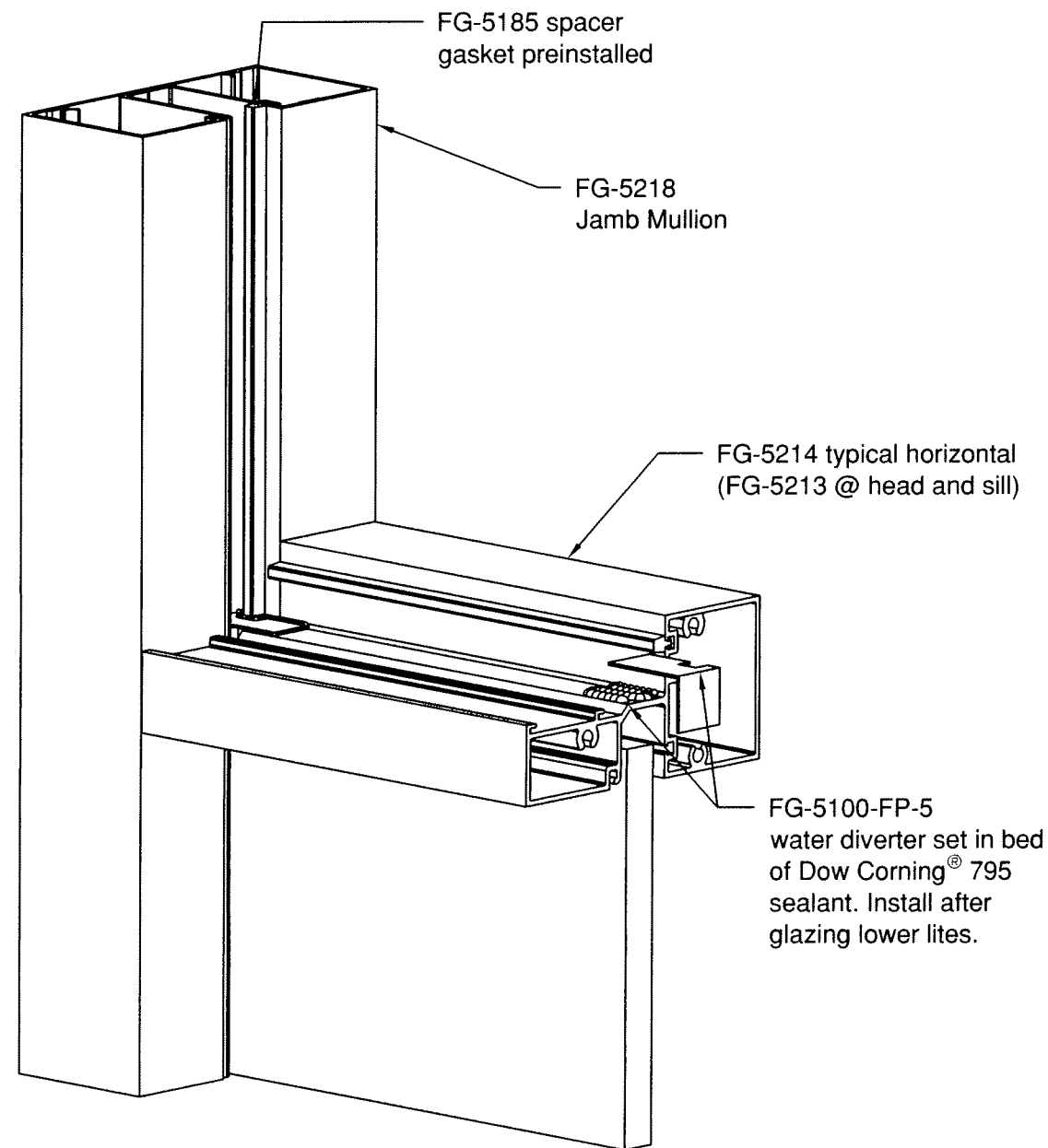
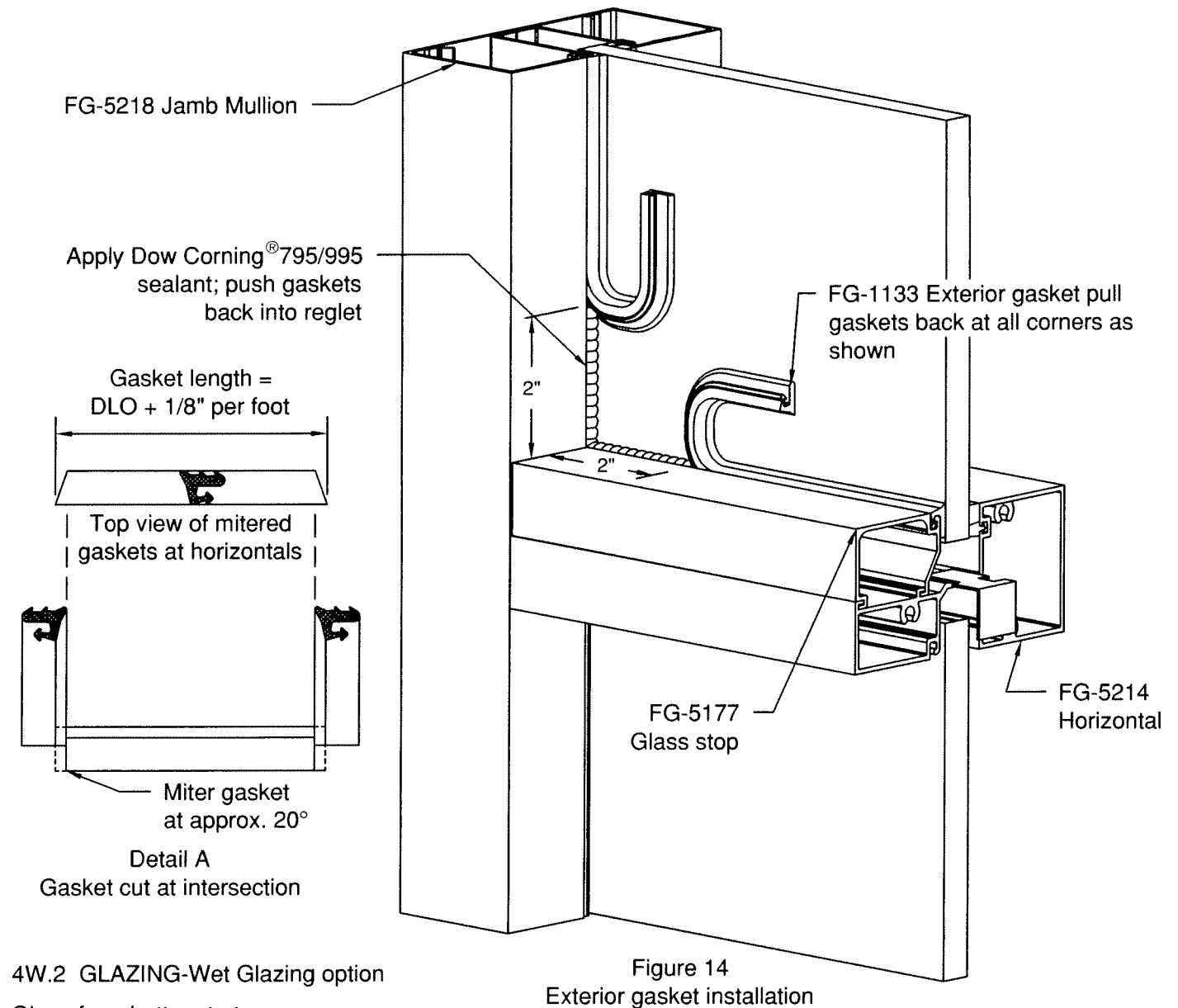


Figure 13
Water diverter and gasket assembly



4W.2 GLAZING-Wet Glazing option

Glaze from bottom to top.

- 4.2.1 Set glass into opening, push in to deep pocket first, at sill place glass on FG-5225 setting chair, then after centering in DLO, pull glass up and position FG-5186 setting block on setting chair (at 1/4 points) **See figure 16 on sheet 10.** At horizontal same procedure is used, except no setting chair is used.
- 4.2.2 Install exterior FG-5177 glass stops.
- 4.2.3 Install exterior FG-1133 glazing gaskets starting at the middle of the glass
- 4.2.4 Cut gaskets a minimum of 1/8" per foot longer than daylight opening to provide for adequate compression. as shown at **Figure 14 detail A.**
- 4.2.5 After gaskets are pressed in place. Pull gasket from pocket as shown in Figure 13 above. Clean glass and gaskets a minimum of 2" from each end with isopropyl alcohol. Apply Dow Corning® 795/995 sealant see Figure 14. Push gaskets into reglet, **See figure 15 on sheet 10.**

StormMax FG-5100T INSTALLATION & GLAZING MANUAL

GLAZING - WET GLAZED

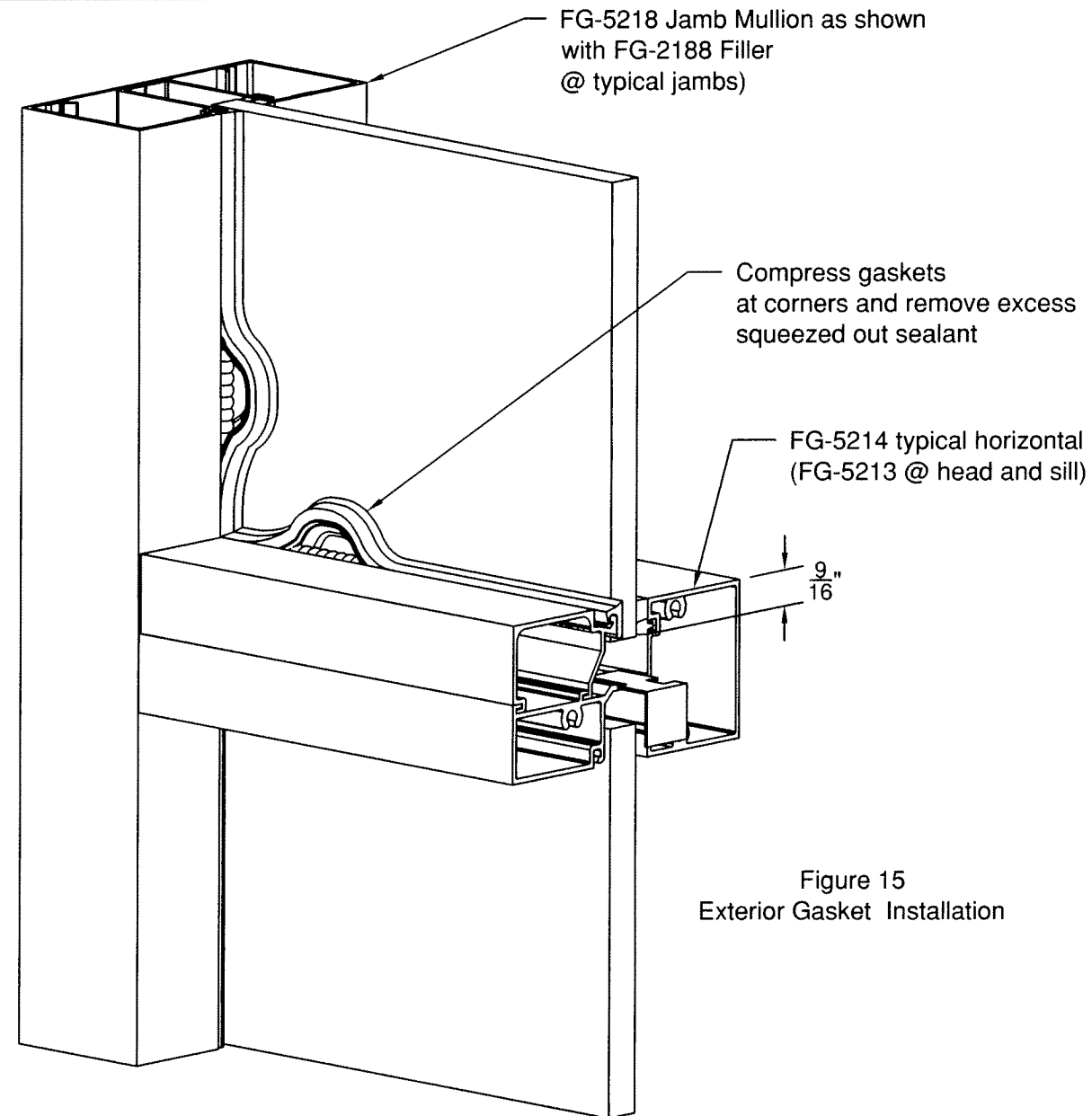


Figure 15
Exterior Gasket Installation

4.2 GLAZING- (Continued)

4.2.6 Mask off glass and aluminum with 1" wide (minimum) low adhesion masking tape. **SEE Figure 16.** Working a single DLO at a time, Fill cavity around full perimeter of DLO with Dow Corning® 995 sealant as shown, care should be taken not to leave any voids and eliminate air bubbles in sealant (**See Detail. A**). Immediately tool , creating a finished joint with a beveled/curved joint surface **See detail B above right**.

4.2.7 Remove masking tape 10 minutes after tooling; taking care not to damage tooled sealant.

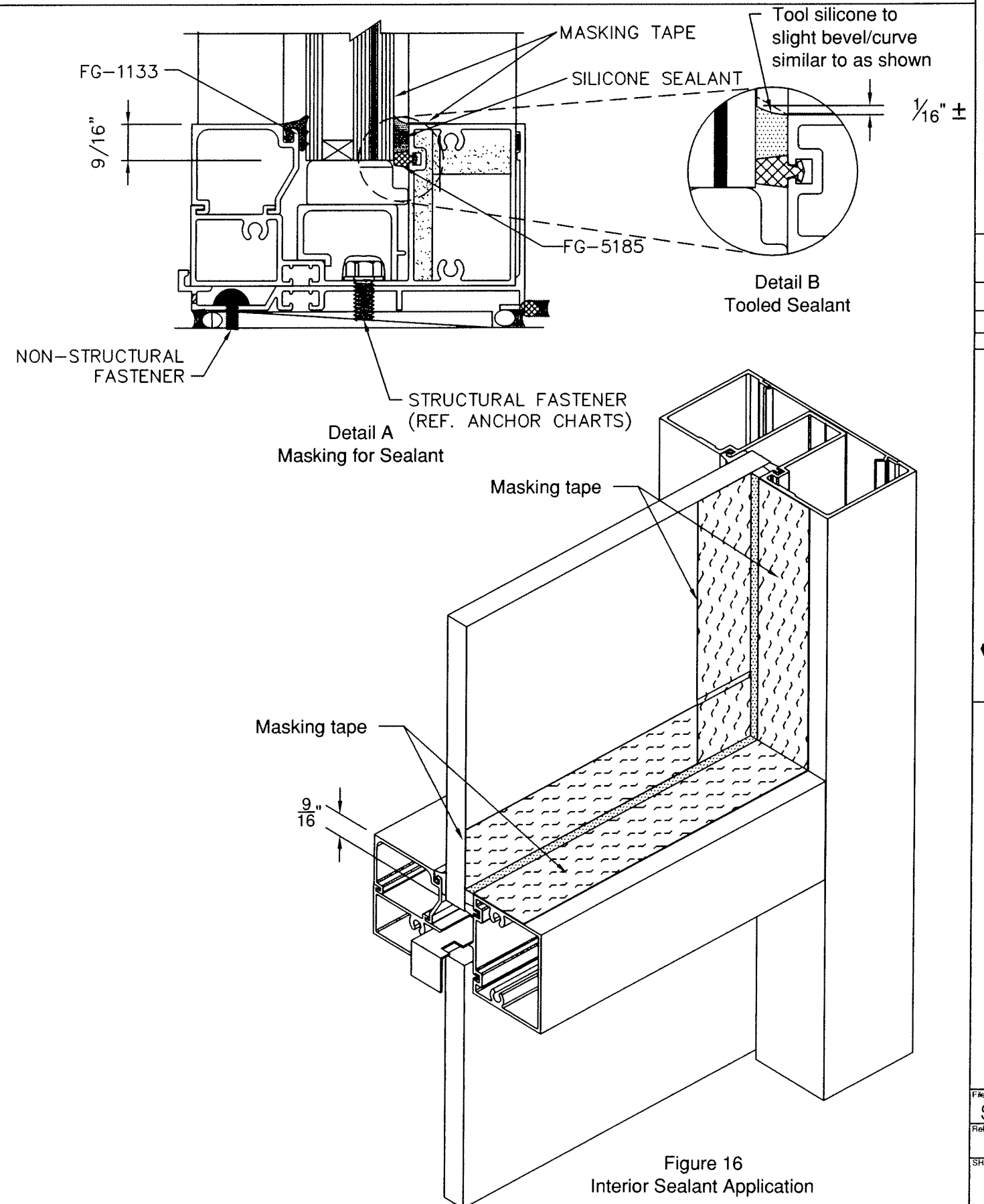


Figure 16
Interior Sealant Application

Oldcastle
BuildingEnvelope[™]
803 Airport Road
Terrell, TX 75160
(800) 869-4567

StormMax FG-5100T
Installation and Glazing Manual
General Notes

Installation & Glazing Manual
is product specific - For review only

StormMax FG-5000 IM
Release 2 Date 01-2010
SHEET

10
OF 13

StormMax FG-5100T INSTALLATION & GLAZING MANUAL

DOOR INSTALLATION

5.3 DOOR PREPARATION AND GLAZING

FP-5000-PP1 setting block/side block, V-2108 (1/4" x 1/4") spacer gasket, FS-114 (#8 x 3/8" PPHSMS) fasteners for attaching D-152 glass stop and FG-1133 gasket are shipped loose.

5.3.1 Install D-152 glass stop, this may be installed on either interior or exterior side of the door. It is recommended that D-152 be installed on the interior side of the doors receiving panic hardware to allow for reglazing without removing the panic bars.

5.3.2 Pilot holes are predrilled in D-152 glass stop. Determine side of door you desire to place the glass stop and match drill holes into the horizontal rails, vertical door stiles and attach with FS-114 screws.

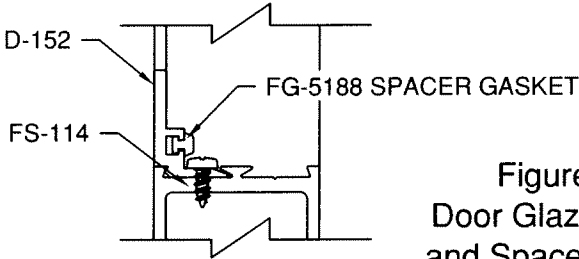


Figure 27
Door Glazing Stop
and Spacer Gasket

5.3.3 Install FP-5000-PP1 adhesive back setting block/side block as shown below. Blocks may be doubled as required due to glass tolerances.

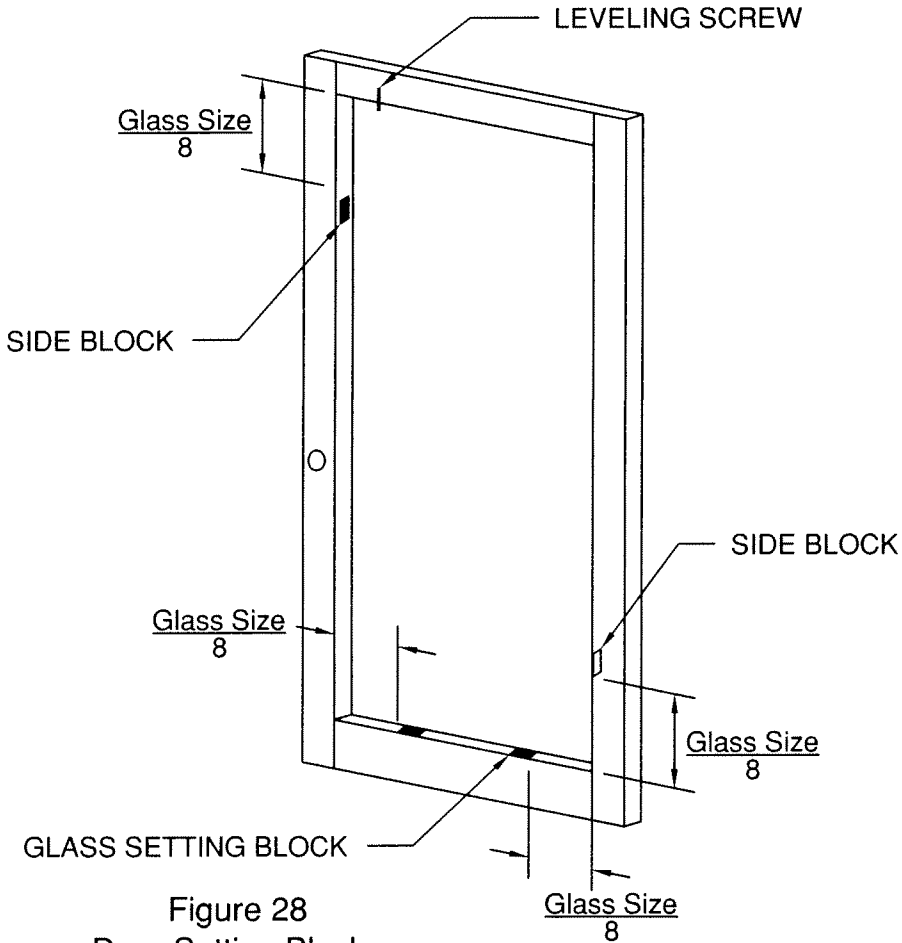


Figure 28
Door Setting Blocks

5.3(continued) DOOR PREPARATION AND GLAZING

- 5.3.4 Center glass in opening on setting blocks and aligned with side blocks.
- 5.3.5 Once the glass is in the correct position, screw the glass jack down to the top of the glass.
- 5.3.6 Install S-83 horizontal glass stop first.

Note: Top stops are notched to clear glass jack. Be sure to hook the stop into the dovetails on the rails and stiles; then snap into place. A mallet may be used to drive stops into place.

5.3.7 Roll FG-1133 gasket into S-83. See detail 'A' for cutting intersections and cutting.

5.3.8 Mask off glass with low adhesive masking tape and install Dow Corning® 995 into the cavity between the glass and D-152 glass stop. Remove masking tape immediately after installation of silicone taking care not to damage or pull silicone from the cavity.

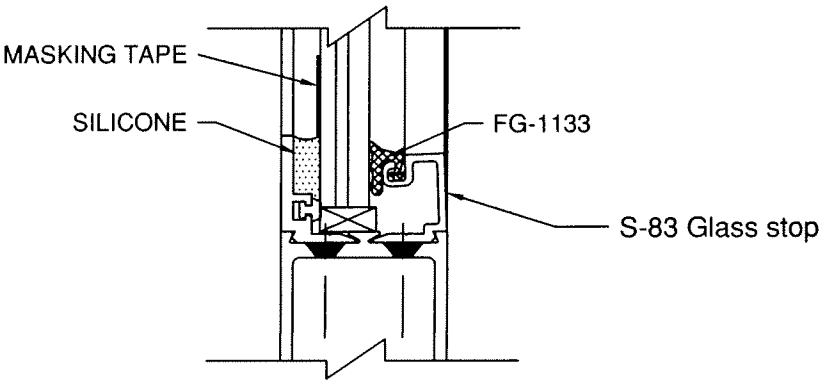
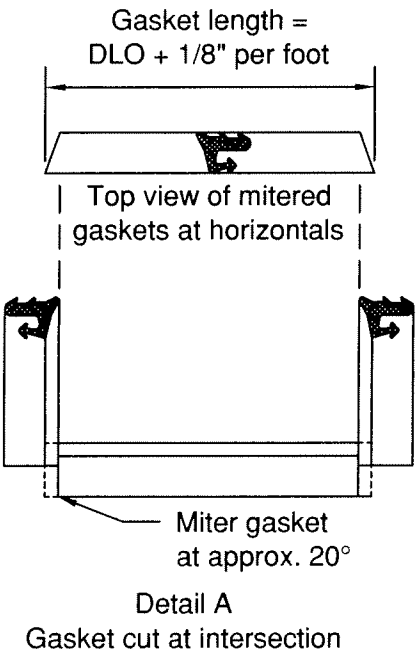


Figure 19
Door Glazing
Roll in Gasket and Sealant Application



MANUAL COMP		REV	BY	DATE	DESCRIPTION
<div>Oldcastle BuildingEnvelope® 803 Airport Road Terrell, TX 75160 (800) 869-4567</div>					
<div>StormMax FG-5100T Installation and Glazing Manual General Notes Installation & Glazing Manual is product specific - For review only</div>					
FileName StormMax FG-5100T IM					
Release 1		Date 07-2010			
SHEET 12 OF 13					

StormMax FG-5100T INSTALLATION & GLAZING MANUAL

DOOR INSTALLATION

5.4 ENTRANCE DOOR FRAME INSTALLATION WITH SUBSILL FOR SIDELIGHTS

When entrance occur, install entrance frames first. Subsill butts against door jamb(s). The subsill abutting the door jamb does not require an end dam.
Field Note : The bottom of the inside of the Door Jamb mullion must be sealed to the substrate and the end of the subsill must also be sealed see **Figure 20 below**.

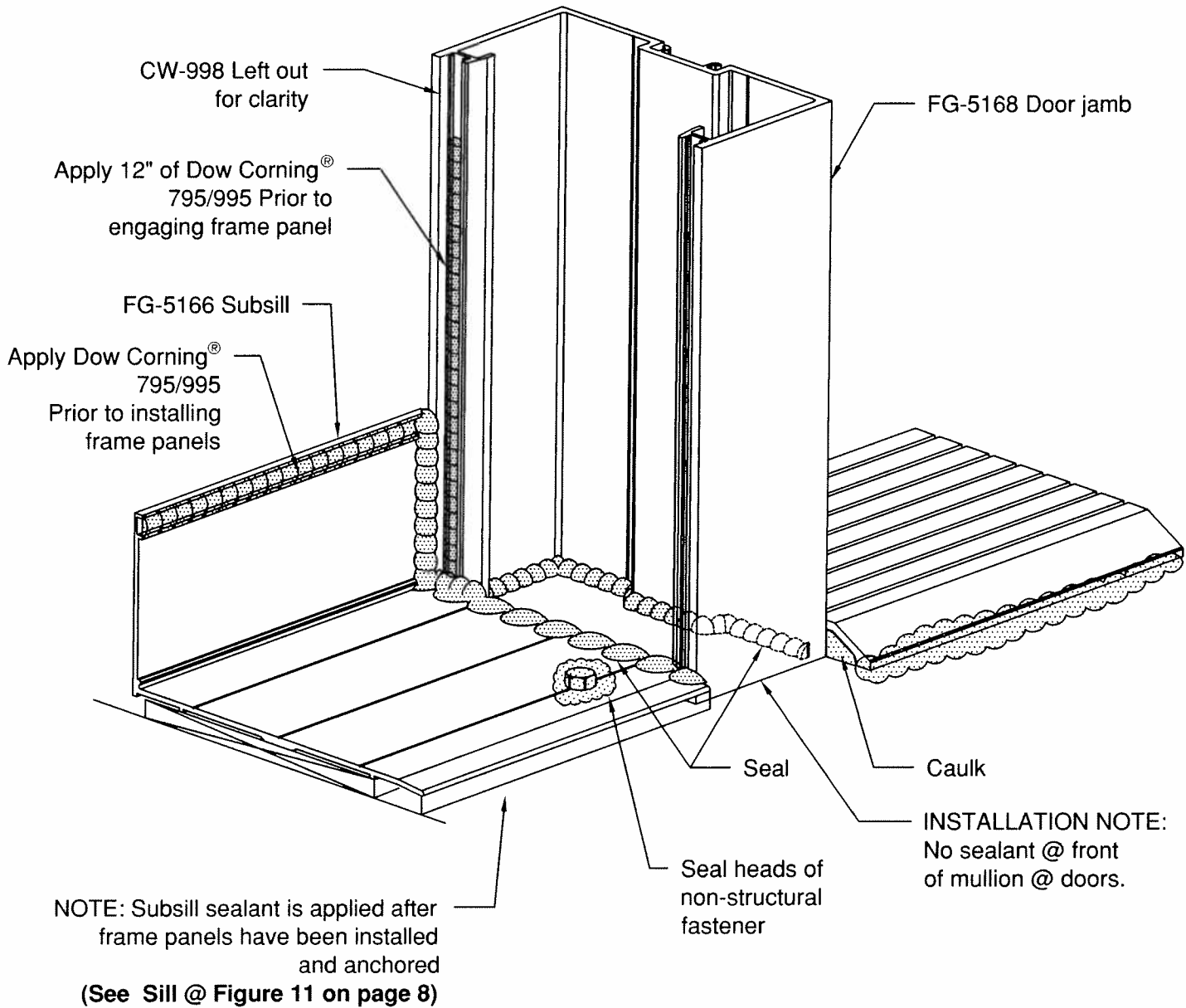




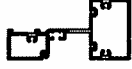





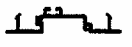
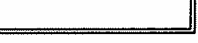
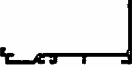







Figure 20
Door Jamb and Subsill sealant Application

PARTS LIST

STANDARD FRAMING		STANDARD ACCESSORIES	
FG-5100T FRAMING		FG-5100T Accessories	
ITEM	DESCRIPTION	ITEM	DESCRIPTION
 FG-5216	Vertical Mullion	 FG-1133	Exterior Glazing Gasket
 FG-5218	Wall Jamb	 FG-5185	Interior Spacer Gasket Wet Glazed option
 FG-5214	Intermediate Horizontal	 FG-5186	Setting Block
 FG-5213	Head/Sill	 FG-5226	Setting Chair
 FG-5177	Glass Stop	 FG5100-FP-5	Water Diverter
 FG-5217	Pocket Filler for FG-5216	 FG5000-FP-11	Sill Flashing End Dam (Attach with 1 ea. FS-54 screws)
 FG-5215	Subsill Flashing	 FG5000-FP-13	Jamb Anchor Plate
 FG-2188	PVC Flat Filler	 FS-8	#14 x 1" HHSTS Assembly Screw
		 FS-54	#10-24 x 3/8" UCPFH Screws
		 SM-5601	Joint Sealant Tape 1/8" x 1/2"

MANUAL COMP

REV BY DATE

DESCRIPTION

Oldcastle BuildingEnvelope™

803 Airport Road
Terrell, TX 75160
(800) 869-4567

StormMax FG-5100T
Installation and Glazing Manual
General Notes

Installation & Glazing Manual
is product specific - For review only

StormMax FG-5100T IM

Release 1 Date 07-2010

SHEET

13

OF 13